

REMARKS

Claims 1 to 72 are pending in the application, of which claims 1, 7, 13, 19, 25, 29, 31, 36, 41, 46, 51, 56, 61, 65 and 69 are the independent claims. Claims 46 to 72 have been added by this amendment. Favorable reconsideration and further examination are respectfully requested.

Initially, Applicants thank the Examiner for the indication that claims 7 to 12, 19 to 24, and 29 to 45 are allowable and for the indication that claims 2 to 6, 14 to 18, and 26 to 28 contain allowable subject matter.

Rather than rewriting claims 5, 17 and 28 into independent form, Applicants present new independent claims 46, 51 and 56, which are drawn along the lines of the unamended independent claims and which contain subject matter of allowable dependent claims 5, 17 and 28. Specifically, new independent claim 46 is roughly equivalent to unamended claims 1 and 5; new independent claim 51 is roughly equivalent to unamended claims 13 and 17; and new independent claim 56 is roughly equivalent to unamended claims 25 and 28. Accordingly, new independent claims 46, 51 and 56, and the claims that depend therefrom, are believed to be allowable.

Applicants also present for examination new independent claims 61, 65 and 69. The claims contain features of allowable dependent claim 6, which are similar to the features of allowed claims 17, 19 and 29. That is, each of newly-presented claims 61, 65 and 69 includes reading prefetch data from an area of a storage medium that precedes demand data in a direction of movement of the storage medium during reading and from an area of the storage medium that follows the demand data in a direction of movement of the

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storage medium during reading. These features are not believed to be found in the art of record, as evidenced by the allowability of other claims containing similar features. Thus, claims 61, 65 and 69, and their dependent claims, are believed to be allowable.

Turning now to the art rejection, claims 1, 13 and 25 continue to stand under §102(b) over U.S. Patent No. 5,473,761 (Parks). As shown above, Applicants have amended claims 1, 13 and 25 to clarify the invention. In view of these clarifications, reconsideration and withdrawal of the art rejection are respectfully requested.

Amended independent claim 1 defines a method of reading data from a storage medium. The method includes reading data on the storage medium in response to a command, the data comprising prefetch data and demand data, storing the demand data in a region of memory, and issuing an interrupt after the demand data has been stored in memory and while the prefetch data is being read.

The applied art is not understood to disclose or to suggest the foregoing, particularly issuing an interrupt after demand data has been stored in memory and while the prefetch data is being read. More specifically, it is true that Parks describes issuing an interrupt after data from a read operation is stored in memory. However, Parks does not describe issuing the interrupt while the prefetch data is being read. In fact, Parks states just the opposite, i.e., that the Parks' interrupt is issued after a read operation is complete. That is, as correctly noted in the Office Action, Parks, at column 22, lines 5 to 7, states:

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"When the disk drives *complete* the read by putting the read data in the allocated buffer memory, it issues an interrupt..." (emphasis added).

Thus, Parks is not understood to disclose or to suggest at least issuing an interrupt after demand data has been stored *but while prefetch data is being read*. For at least this reason, claim 1 is believed to be allowable.

Amended independent claim 13 is a readable medium claim that roughly corresponds to claim 1; and amended independent claim 25 is an apparatus claim that roughly corresponds to claim 1. These claims are also believed to be in condition for allowance for at least the reasons noted above.

In view of the foregoing amendments and remarks, the entire application is believed to be in condition for allowance, and such action is respectfully requested at the Examiner's earliest convenience.

Please apply any other charges or credits, including the fees for the additional claims and any necessary extension fees, to Deposit Account No. 06-1050.

Applicants' undersigned attorney can be reached at the address shown below. All correspondence should continue to be directed to Scott C. Harris at Fish & Richardson P.C., 4350 La Jolla Village Drive, Suite 500, San Diego, CA 92122.

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Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

- -1. (Twice Amended). A method of reading data from a storage medium, comprising:

reading data on the storage medium in response to a command, the data comprising prefetch data and demand data;

storing the demand data in a region of memory; and

issuing an interrupt after the demand data has been stored in memory and while the prefetch data is being read.

13. (Twice Amended) A machine-readable medium that stores instructions to read data from a storage medium, the instructions causing a machine to:

read data on the storage medium in response to a command, the data comprising prefetch data and demand data;

store the demand data in a region of memory; and

issue an interrupt after the demand data has been stored in memory and while the prefetch data is being read.

25. (Twice Amended) An apparatus for reading data from a storage medium, comprising:

a memory which stores computer instructions; and



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a processor which executes the computer instructions to (i) read data on the storage medium in response to a command, the data comprising prefetch data and demand data, (ii) store the demand data in a region of memory, and (iii) issue an interrupt after the demand data has been stored in memory and while the prefetch data is being read.--

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